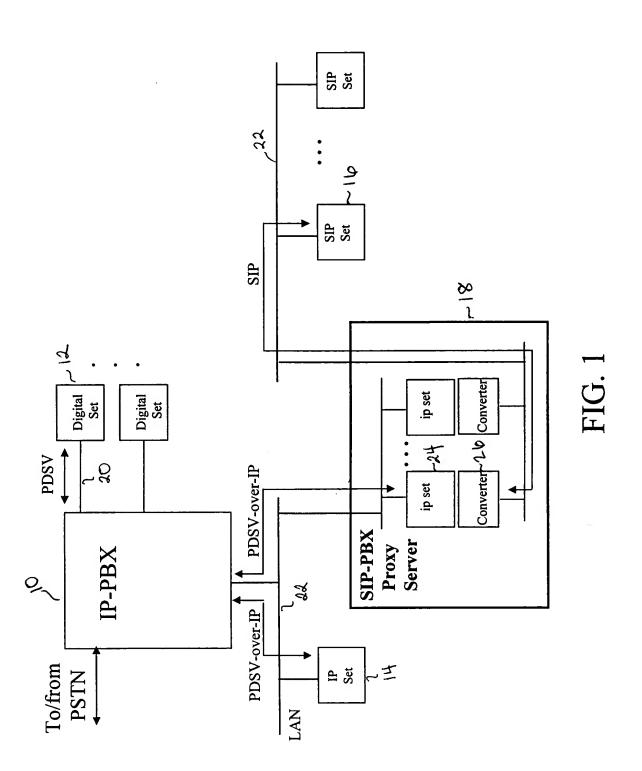
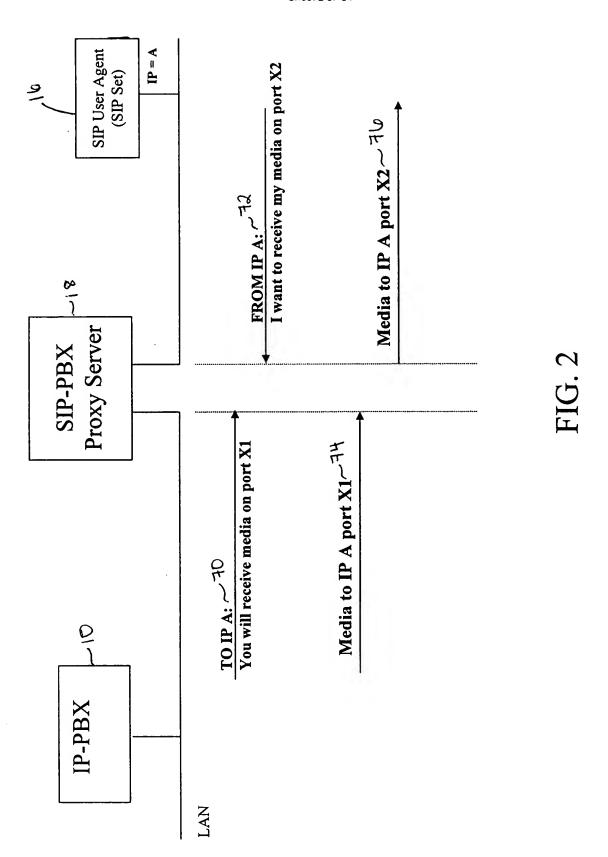
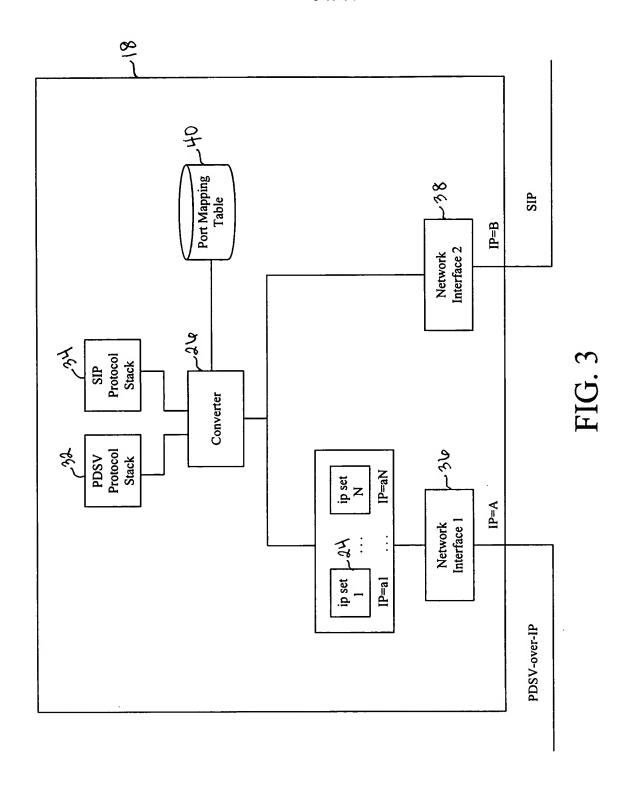
Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2 Inventor(s): Michael S. Wengrovitz et al. Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS Sheet 1 of 34



Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2 Inventor(s): Michael S. Wengrovitz et al. Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS Sheet 2 of 34



Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2 Inventor(s): Michael S. Wengrovitz et al. Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS Sheet 3 of 34



Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2 Inventor(s): Michael S. Wengrovitz et al. Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS Sheet 4 of 34 SIP User Agent (SIP Set) Body contains button push info اق Body contains display info SIP Instant Message SIP Instant Message SIP 8/1 **Proxy Server** SIP-PBX PDSV contains button push info 3 PDSV contains display info PDSV-over-IP PDSV-over-IP PDSV-over-IP **IP-PBX** 3 LAN

Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2 Inventor(s): Michael S. Wengrovitz et al. Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS Sheet 5 of 34

9-		i	ه د ک		-					
Port		PBS1	PBM1		PBS1	PBM2			PBS1	PBMN
IP addr	IPB∿54			IPB			•	IPB		
		Ĭ,	ر. ا							
Port		pas1)	pam1		pas1	pam1			pas1	pam1
IP addr	∫ ipa1			ipa2			•	ipaN		
	50 (

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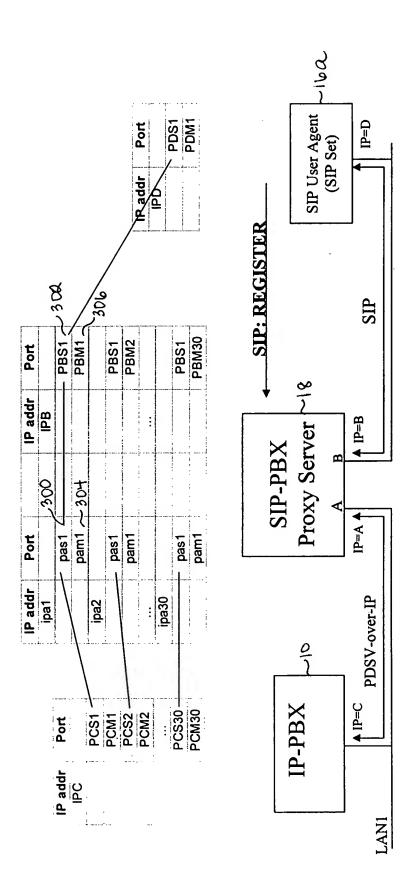
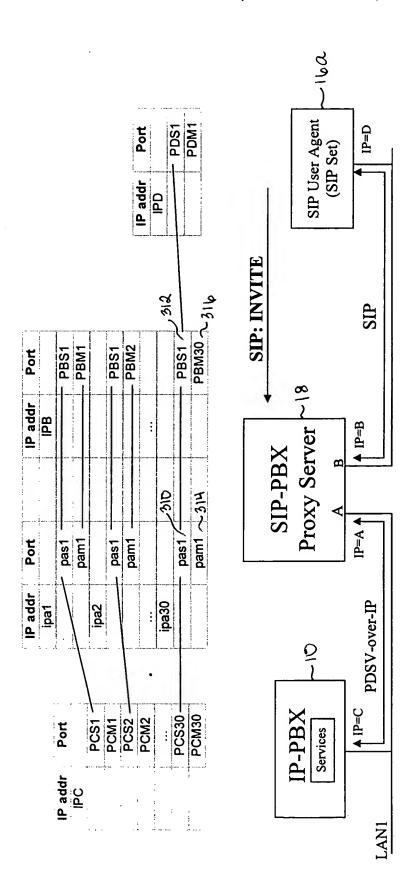
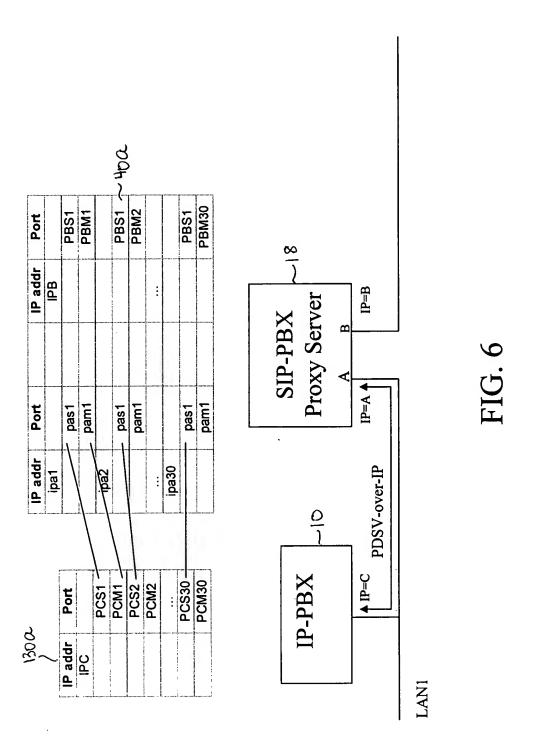


FIG. 5B

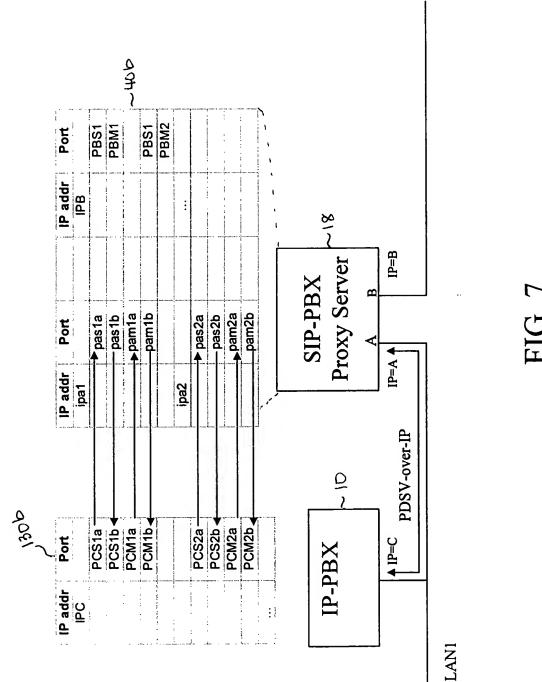
Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2 Inventor(s): Michael S. Wengrovitz et al. Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS Sheet 7 of 34



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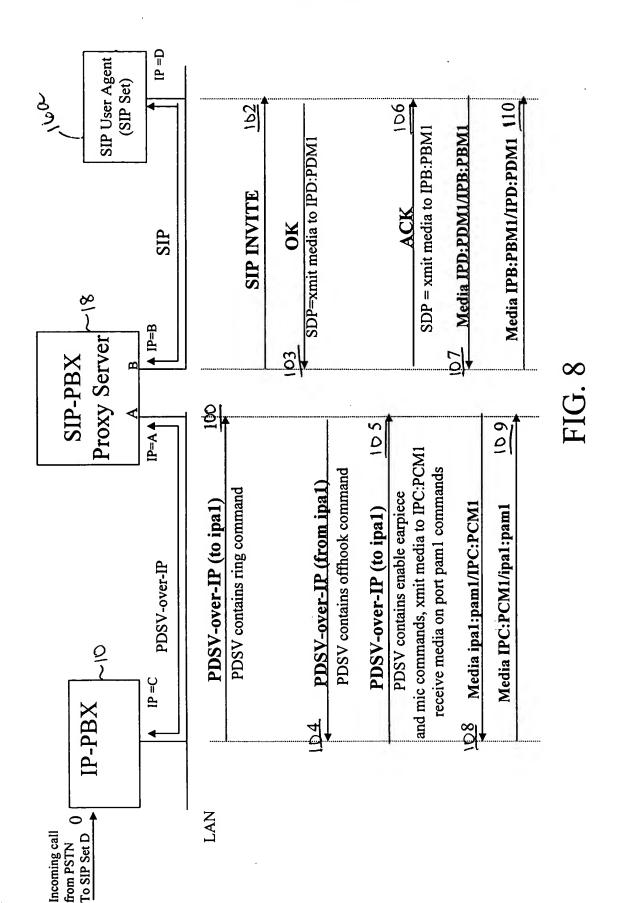
Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2 Inventor(s): Michael S. Wengrovitz et al. Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS Sheet 9 of 34



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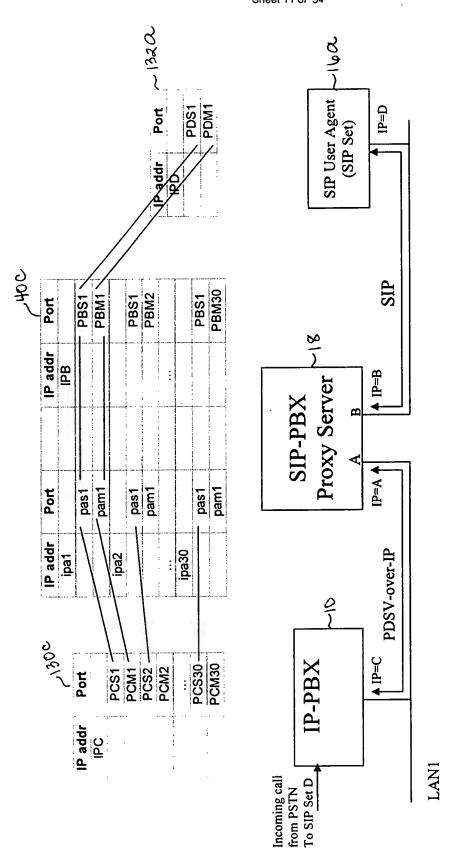
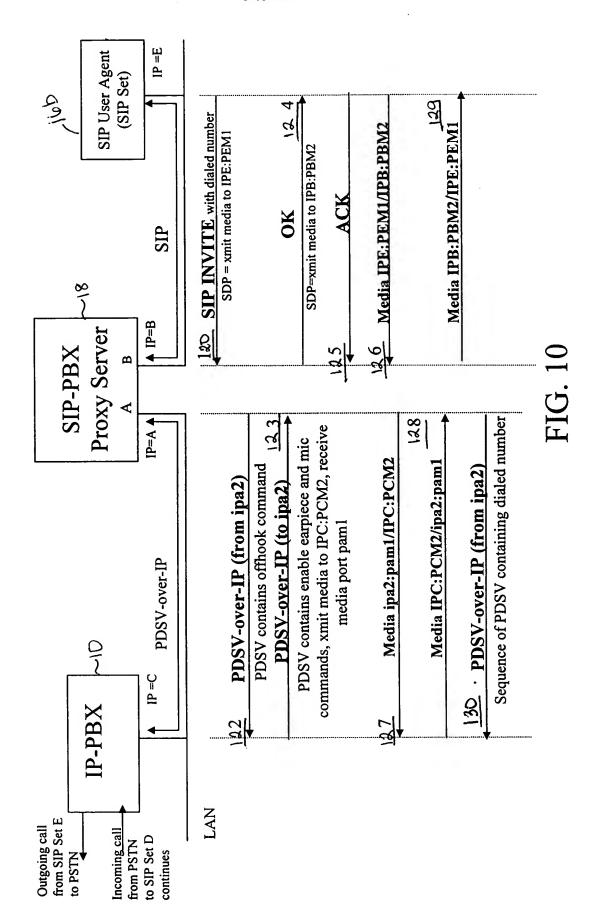


FIG. 9

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Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2 Inventor(s): Michael S. Wengrovitz et al. Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS Sheet 13 of 34 ~1390 SIP User Agent Port PES1 PEM1 IP=E (SIP Set) 48 IP addr Por ~132b SIP User Agent PDS1 PDM1 IP=D (SIP Set) IP addr IP addr Port ∼ 40d PBS1 PBM2 PBS1 PBM30 PBS1 PBM1 IP=B Proxy Server SIP-PBX IP=A Por pas1 pam1 pas₁ pam1 pas1 IP addr ipa1 ... ipa30 PDSV-over-IP Pon PCS1 / PCM1 / PCS2 / PCM2 ♦ IP=C PCS30-PCM30 IP-PBX IP addr IPC LANI Outgoing call Incoming call

FIG. 11

Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2 Inventor(s): Michael S. Wengrovitz et al. Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS Sheet 14 of 34 Digit 1 button offhooks User Pushes IP=E SIP User Agent (SIP Set) 138 Media IPB:PBM2/IPE:PEM1 143 WO Media IPE: PEMI/IPB: PBM2 SIP Instant Message Body contains digit1 info SDP = xmit media to IPE:PEM1 SDP=xmit media to IPB:PBM2 SIP INVITE OK SIP IP=B Proxy Server 无元 139 12 SIP-PBX 포 $\tilde{\mathcal{Z}}$ commands, xmit media to IPC:PCM2, receive IP=A PDSV contains enable earpeice and mic Media ipa2:pam1/IPC:PCM2 Media IPC:PCM2/ipa2:pam1 PDSV contains offhook command PDSV-over-IP (from ipa2) PDSV-over-IP (from ipa2) PDSV-over-IP (to ia2) PDSV contains digit 1 media port paml PDSV-over-IP IP=C **IP-PBX** 34 136 王 LAN Outgoing call from SIP Set E Incoming call to SIP Set D from PSTN to PSTN continues

FIG. 12

Attorney: Josephine E. Chang
Docket No.: 51471/JEC/X2
Inventor(s): Michael S. Wengrovitz et al.
Title: SYSTEM AND METHOD FOR INTERFCING
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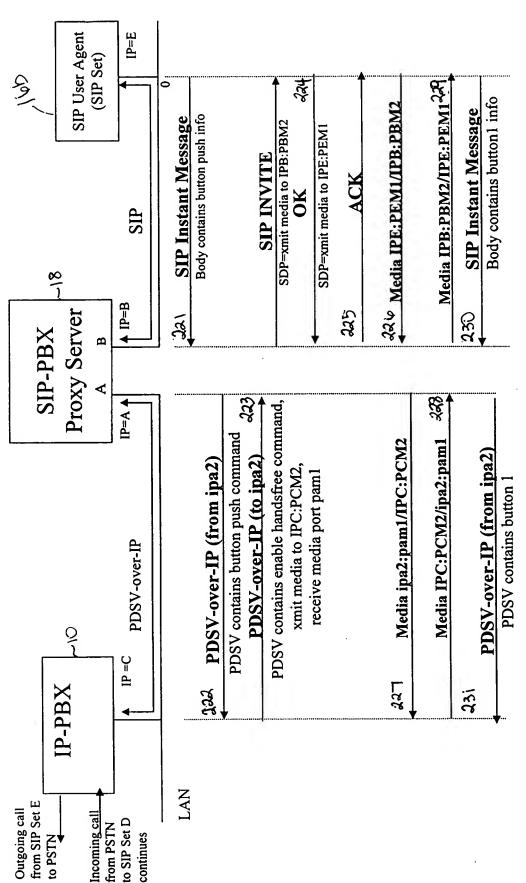
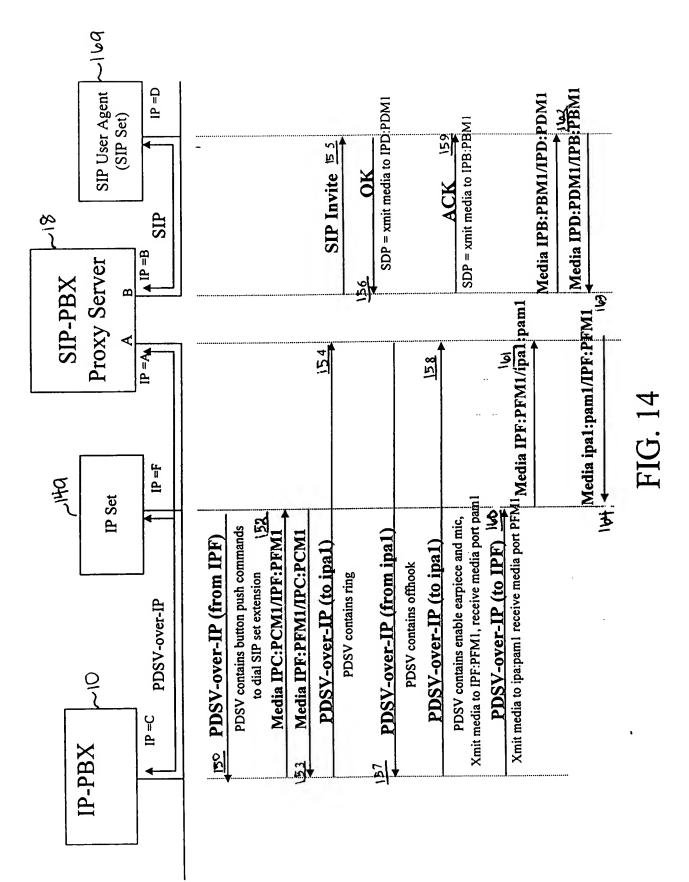


FIG. 13

Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2

Inventor(s): Michael S. Wengrovitz et al.
Title: SYSTEM AND METHOD FOR INTERFCING
LEGACY IP-PBX SYSTEMS TO SIP NETWORKS

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Docket No.: 51471/JEC/X2
Inventor(s): Michael S. Wengrovitz et al.
Title: SYSTEM AND METHOD FOR INTERFCING
LEGACY IP-PBX SYSTEMS TO SIP NETWORKS

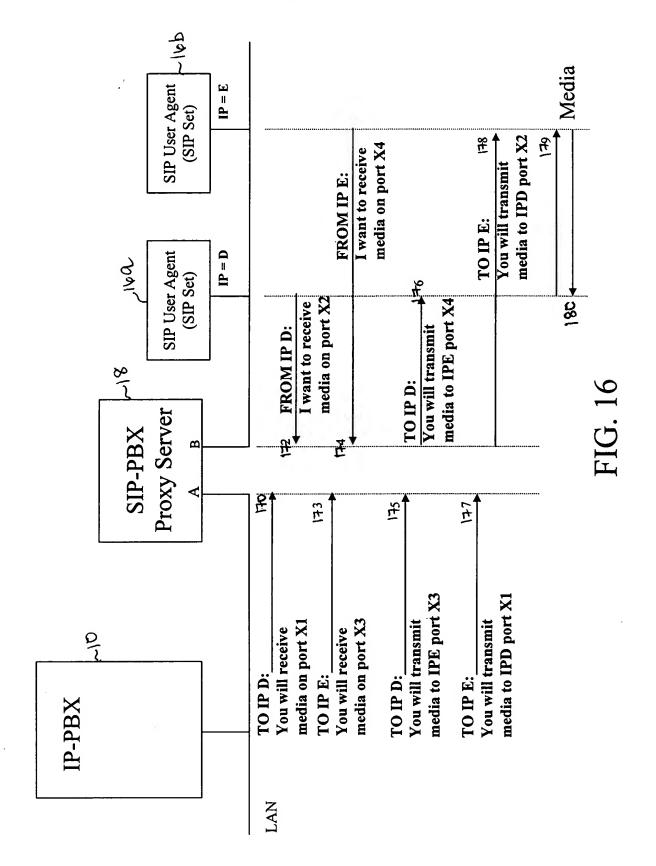
Sheet 17 of 34 760 -132C SIP User Agent PDS1 PDM1 IP=D Port (SIP Set) IP ACILY Port ~ 40€ SIP PBS1 PBM30 PBS1 PBM2 PBS1 IP addr IPB IP=B **Proxy Server** SIP-PBX IP=A pas1 pas1 pam1 pas1 IP addr 6a30 ipa1 ipa2 ひさし PFS1 PFM1 Por IP=F IP Set IP addr PDSV-over-IP 9 P H -130e ♦ IP=C PCM30 PCS31-PCM31 PCS30 PCM1 PCS2 PCM2 **IP-PBX** PCS1 **IP addr** IPC

FIG. 15

LANI

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Inventor(s): Michael S. Wengrovitz et al.
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Title: SYSTEM AND METHOD FOR INTERFCING LEGACY IP-PBX SYSTEMS TO SIP NETWORKS

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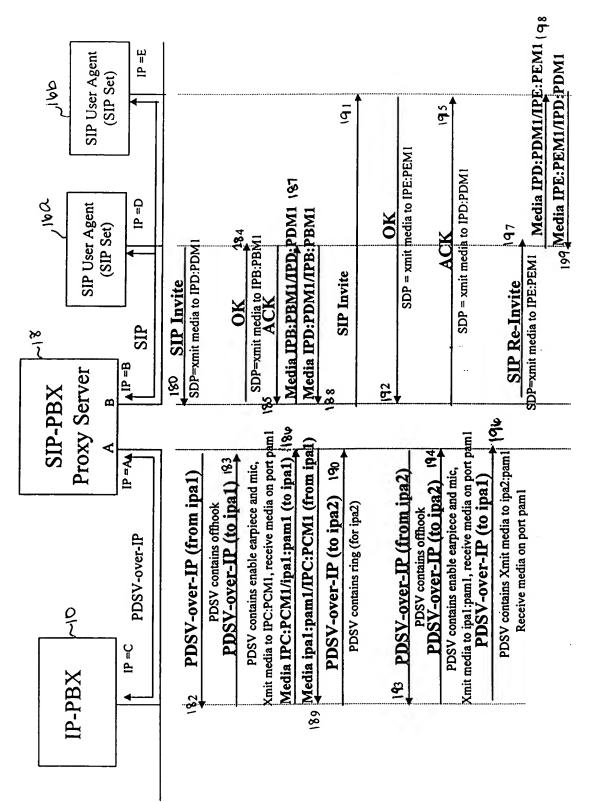


FIG. 17

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Docket No.: 51471/JEC/X2
Inventor(s): Michael S. Wengrovitz et al.
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LEGACY IP-PBX SYSTEMS TO SIP NETWORKS
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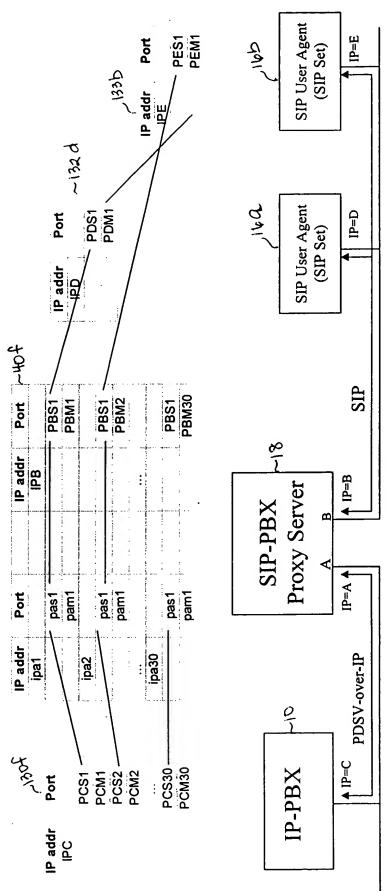
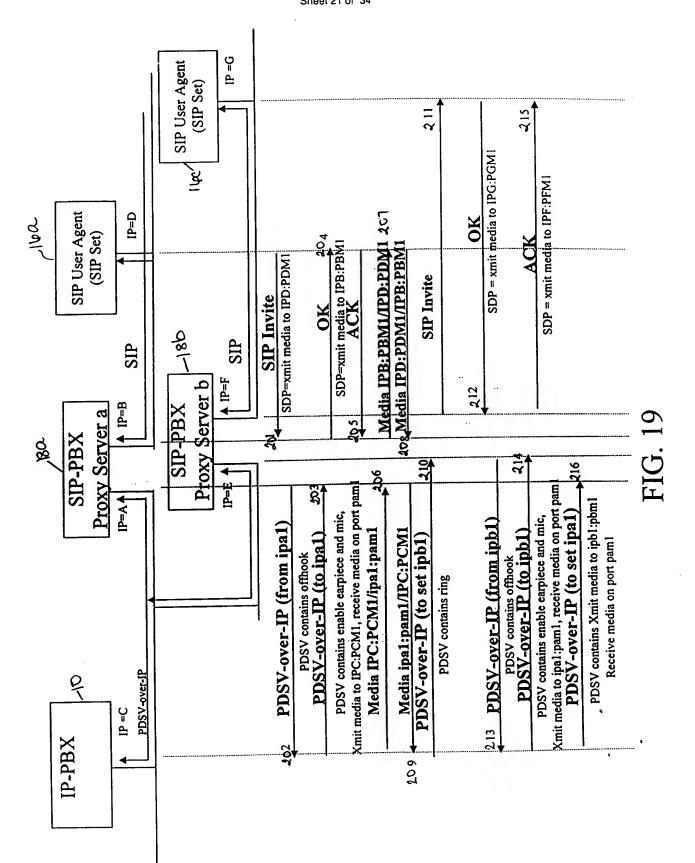


FIG 18

LANI

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Inventor(s): Michael S. Wengrovitz et al.
Title: SYSTEM AND METHOD FOR INTERFCING
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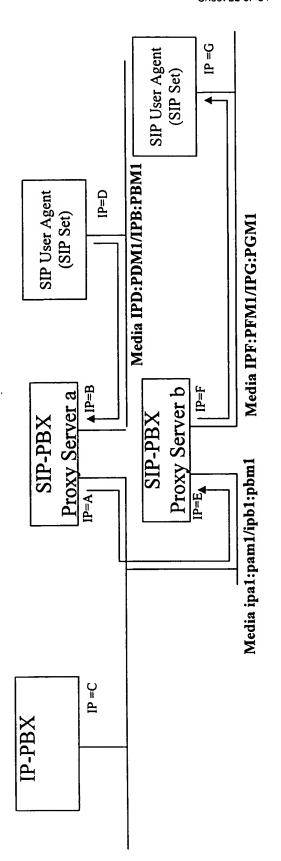
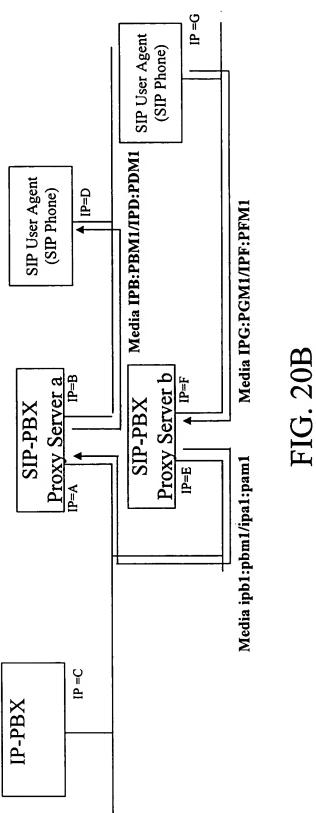


FIG. 20A

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Inventor(s): Michael S. Wengrovitz et al.
Title: SYSTEM AND METHOD FOR INTERFCING
LEGACY IP-PBX SYSTEMS TO SIP NETWORKS
Sheet 24 of 34 LAN 1 LANN LAN₂ SIP User Agent SIP User Agent SIP User Agent (SIP Set) (SIP Set) (SIP Set) • SIP User Agent (SIP Set) SIP User Agent SIP User Agent (SIP Set) (SIP Set) Proxy Server N Proxy Server 2 В SIP-PBX 180 **Proxy Server** 981 SIP-PBX SIP-PBX IP-PBX LAN 0

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FIG. 21

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LAN 0

FIG. 22

Attorney: Josephine E. Chang
Docket No.: 51471/JEC/X2
Inventor(s): Michael S. Wengrovitz et al.
Title: SYSTEM AND METHOD FOR INTERFCING
LEGACY IP-PBX SYSTEMS TO SIP NETWORKS
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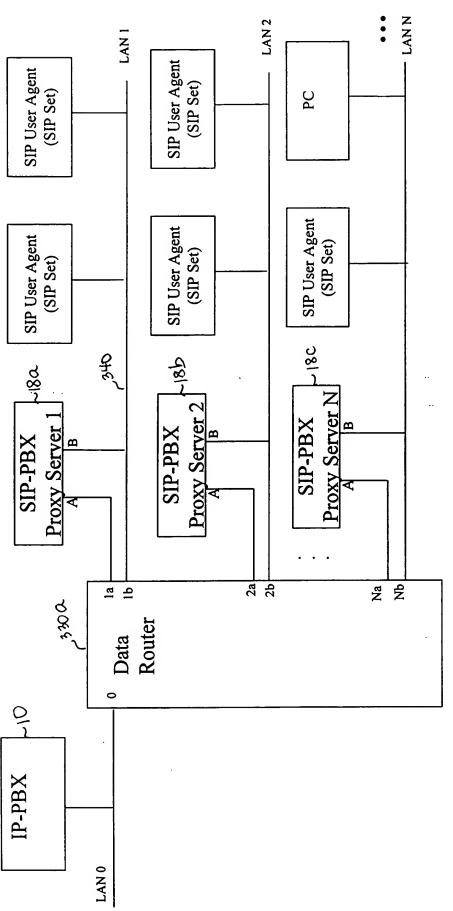


FIG. 23

Inventor(s): Michael S. Wengrovitz et al.
Title: SYSTEM AND METHOD FOR INTERFCING
LEGACY IP-PBX SYSTEMS TO SIP NETWORKS
Sheet 27 of 34 ~350 LAN 352 LAN₂ LAN 1 ♠ 192.168.10.3 SIP User Agent SIP User Agent (SIP Set) (SIP Set) PC192.168.10.x 192.168.2.x 192.168.1.x 192.168.10.2 SIP User Agent SIP User Agent SIP User Agent (SIP Set) Proxy Server at 192.168.10.1 (SIP Set) (SIP Set) SIP-PBX J18C at 192.168.110.1 -192.168.110.30 180 8 18 2 Internal ip sets Proxy Server SIP-PBX Proxy Server SIP-PBX Proxy Server Ω SIP-PBX 192.168.10.250 (Default GW for 192.168.10.x) 2a 2b 1a 1b Router Data 9 192.168.200.250 (Default GW for 192.168.200.x) 192.168.250.250 (Default GW for 192.168.250.x) 4 192.168.200.10 **♦**192.168.250.10 IP-PBX Email Server 192.168.250.x 192.168.200.x LAN 0 **LAN 50**

Attorney: Josephine E. Chang Docket No.: 51471/JEC/X2

FIG. 24

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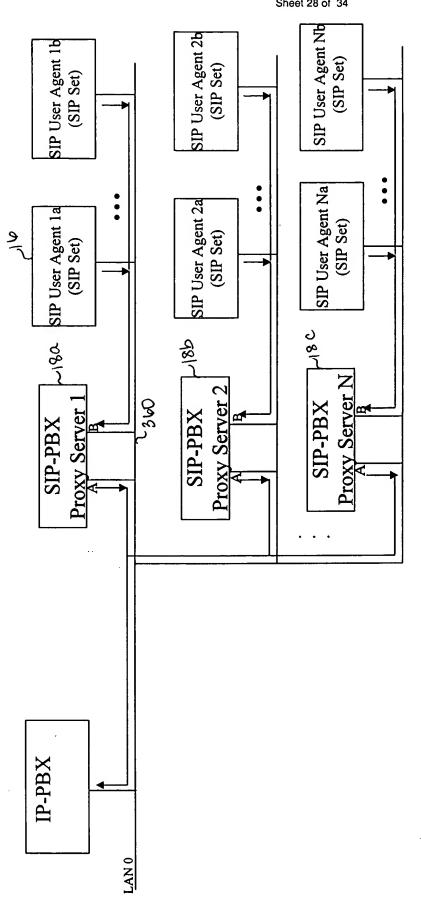


FIG. 25

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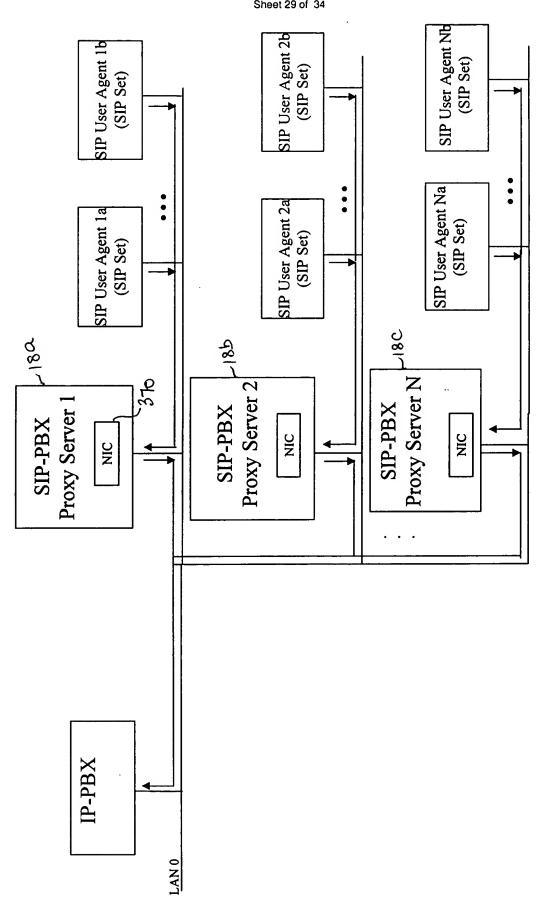


FIG. 26

SIP User Agent (SIP Set)

SIP User Agent (SIP Set)

180

Proxy Server

280

IP-PBX

VLAN 1

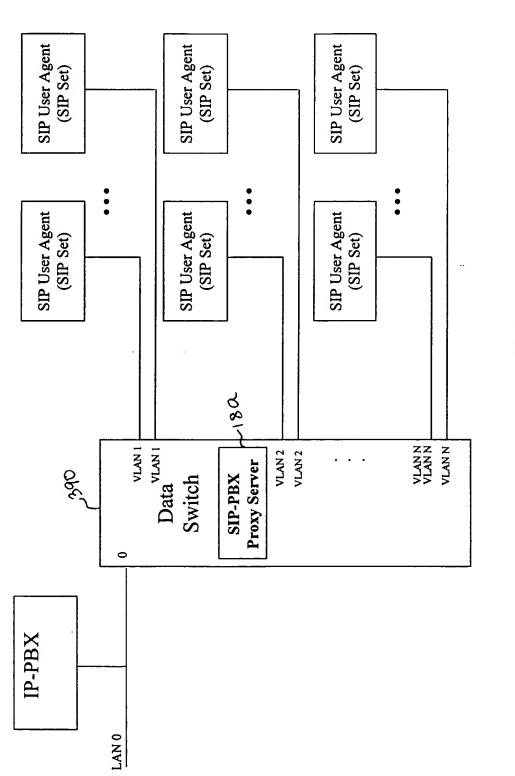
0

LAN 0

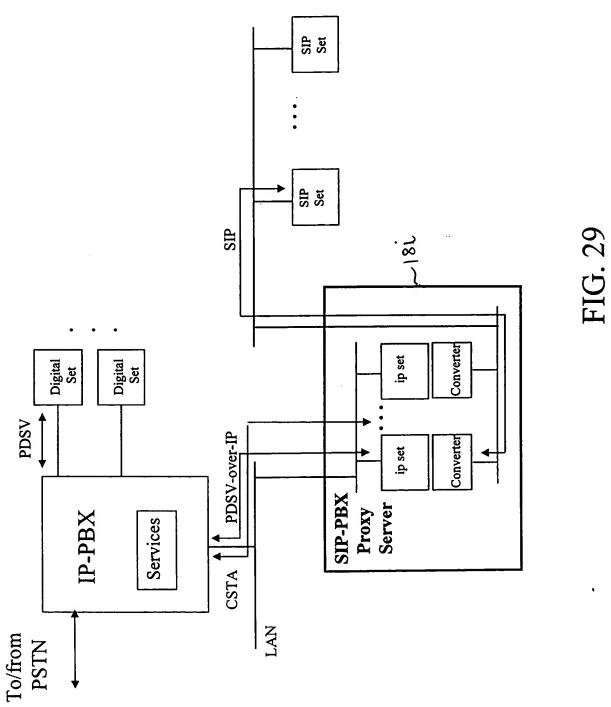
SIP-PBX

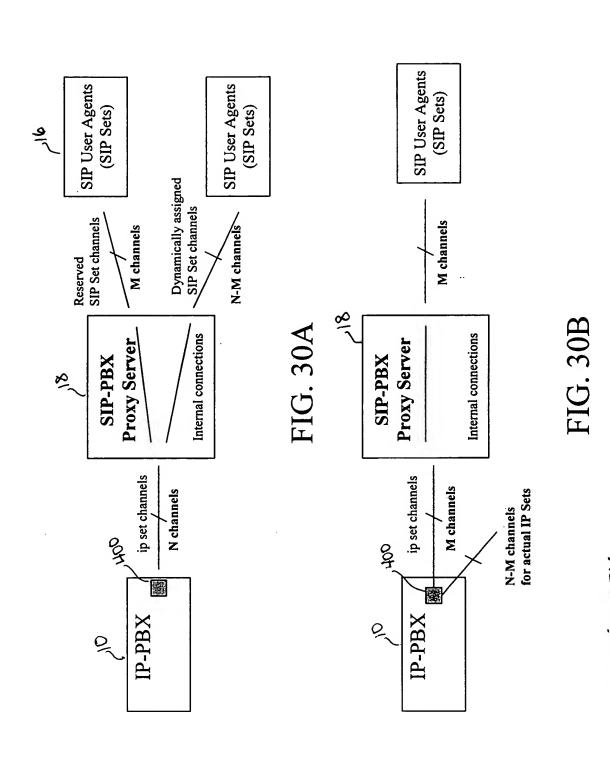


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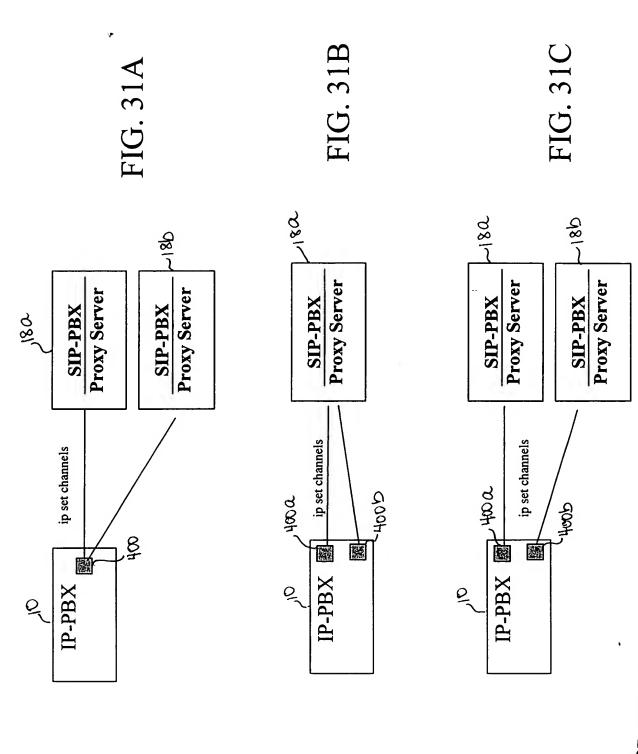




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